UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,008	09/21/2001	Linda Morales	NRT.0103US	4221

21906 7590 05/01/2009

TROP, PRUNER & HU, P.C.
1616 S. VOSS ROAD, SUITE 750
HOUSTON, TX 77057-2631

EXAMINER	
WONG, WARNER	
ART UNIT	PAPER NUMBER
2416	

MAIL DATE	DELIVERY MODE
05/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/960,008	MORALES ET AL.	
	Examiner	Art Unit	
	WARNER WONG	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,8,9,12-18 and 20-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,4,8,9,12-18 and 20-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 3, 8, 30-33, 35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen (US 5,697,055) in view of Dolan (US 20020057653).

Regarding claim 1, Gilhousen describes a method for performing wireless communications between base stations, comprising:

communicating bearer traffic for a packet-switched communication session between a mobile station and a first base station (BS) associated with a first type of wireless system (fig. 1 & col. 6, lines 58-65, MS 18 sets up call with BS 16);

determining if handoff is required from the first base station to a second base station (BS) associated with a second, different type of wireless system (title, col. 7, lines 9-14 & col. 8, lines 31-34, handoff to another base station of different air interfaces/cellular system).

Gilhousen describes an interconnection between first and a second base station used for handoff messaging, but fails to explicitly describe:

in response to determining that the handoff is required, sending a message from the first base station to the second base station over an interface between the first base

station and second base station, the message indicating to the second base station that handoff is required.

Dolan describes:

in response to determining that the handoff is required, sending a message from the first base station to the second base station over an interface between the first base station and second base station, the message indicating to the second base station that handoff is required (fig. 7 & para. 38, (first) base station 320 communicates via a direct interface with (second) base station 340 in determining that a handoff is required).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to describe a communication between the first base station and the second base station for a handoff as in Dolan for the handoff scheme of Gilhousen.

The motivation for combining the teachings is that it enhances the performance of wireless telecommunications equipment de4ployed in wireless telecommunication networks (Dolan, para. 9).

Regarding claims 3 and 8, Gilhousen further describes:

the first BS comprises an IS-2000 base station and wherein communication the bearer traffic comprises communication the bearer traffic between the mobile station and the IS-2000 base station (col. 8, lines 32-33, communication with the first system/BS may be CDMA, i.e. CDMA-2000, which is IS-2000).

Regarding claim 30, Gilhousen and Dolan combined further describe: sending the message over a link that directly connects the first base station and the second

base station (Dolan, fig. 7 & para. 38, messaging between the base stations via direct link).

Regarding claim 31, Gilhousen and Dolan combined further describe:

the interface allows the messaging to be sent from the first base station system directly to the second base station system (Dolan, fig. 7 & para. 38, messaging between the base stations via direct link).

Regarding claim 32, Gilhousen and Dolan combined further describe:

exchanging the messaging with the second base station through the link that directly connects the first base station system to the second base station system (Dolan, fig. 7 & para. 38, messaging between the base stations via direct link).

Regarding claim 33, Gilhousen further describes:

the MS comprises a hybrid MS that is able to support at least two different wireless communications protocols including a first wireless communications protocol and a second wireless communication protocol (col. 7, lines 9-14 & 31-36, mobile capable of transceiving different wireless (air) protocols);

wherein determining if the handoff is required from the first base station to the second base station comprises determining if the handoff is required from the first base station that communicates with the hybrid mobile station according to the first wireless communications protocol, to the second base station that communicates with the hybrid mobile station according to the second wireless communication protocol (col. 7, lines 9-14 & 31-36).

Regarding claims 35 and 37, Gilhousen further describes: the mobile station comprises a hybrid mobile station that is able to perform wireless communications according to both the first and second protocols, the controller to communicate the bearer traffic with the hybrid mobile station (col. 7, lines 9-14 & 31-36, mobile capable to used handoffs of different air interfaces).

2. Claims 4, 7, 9, 12-15, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen in view of Dolan as applied to claim 1 above, and further in view of Bender (US 2006/0148511).

Regarding claim 4, Gilhousen and Dolan combined describe a handoff determination between the first type of BS exemplified as a CDMA BS to a second type of BS as set forth in claim 3, but fails to describe that the second type of BS may be an HDR/1xEV BS.

Bender also describes the forwarding the mobile's messages/communication, particularly from a CDMA (IS-2000) BS to a HDR (i.e. 1xEV) BS (fig. 1, paragraph 44) which may be for a handoff (paragraph 30).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to specify that the second type of BS of Dolan being a HDR/1xEV type as in Gilhousen and Dolan combined.

The motivation for combining the teachings is that it is highly desirable to forward messages from one type of radio-communications to another (Bender, paragraphs 7, 9).

Regarding claim 9, Gilhousen, Dolan and Bender combined further suggest: the handoffs determination may be from a HDR/1xEV BS to a 1xRTT BS (Bender, fig. 1, paragraphs 7 & 9, message forwarding is understood to be to CDMA (i.e. 1xRTT) radio network from HDR radio network 122).

Regarding claim 12, Gilhousen, Dolan and Bender combined further describe sending another message from the second BS to the first BS to initiate a handoff procedure (Gilhousen, col. 5, lines 59-65, the incorporated CDMA techniques already comprises CDMA call handoff procedure, which describes the handoff messages sent between the first BS and the second BS. The examiner also cites but not used as a reference "IS-95 CDMA and cdma-2000", by Vijay K. Garg, Prentice Hall © 2000, which details CDMA handoff messaging between base stations.)

Regarding claim 13, Gilhousen, Dolan and Bender combined further describe sending a further message from the first base station to the second base station to indicate that the mobile station has been directed to hand off to the second base station (Gilhousen, col. 5, lines 59-65, the incorporated CDMA techniques already comprises CDMA call handoff procedure, which describes the handoff messages sent between the first BS and the second BS. The examiner also cites but not used as a reference "IS-95 CDMA and cdma-2000", by Vijay K. Garg, Prentice Hall © 2000, which details CDMA handoff messaging between base stations.)

Regarding claim 14, Gilhousen describes that the message comprises sending the message over a link between the first BS and the second BS (fig. 2, via link 34).

Regarding claim 15, Gilhousen describes: performing a hard handoff between the first base station and the second base station (col. 11, lines 46-50).

Regarding claims 36-38, Gilhousen, Dolan and Bender combined describe:

the first protocol comprises a1xEV protocol, and the second protocol comprises a 1xRTT protocol (paragraphs 30 & 44).

Claims 16-18 and 20-23 are base station system claims drawn to the limitations deriving from method claims 1-15; hence they are rejected using the same rationale.

Claims 24-29 are article claims drawn to the limitations deriving from method claims 1-15; hence they are rejected using the same rationale.

Response to Arguments

3. Applicant's arguments filed February 11, 2009 have been fully considered but they are not persuasive.

From p. 8 last para. to p. 9 para. 1, the applicants argue regarding claim 1 that Gilbousen and Dolan should not be combinable. Specifically, while Gilhousen describes communication between two different systems using two different air interfaces, “none of these Gilhousen methods that involve multiple systems with associated MSCs (MSCI and MSCII) is there any communication of a message from one base station (associated with a first type of wireless system) to a second base station (associated with a second, different type of wireless system) , over an interface

between the first and second base stations, where the message indicates to the second base station that handoff is required." The examiner respectfully disagrees.

The examiner understands that the Gihousen and Dolan is combinable because both reference are in the related art of cellular communication, with communication between different types of base stations, and describes how a handoff can be made.

The examiner asserts that the above argument is of a piecemeal analysis because while Gilhousen fails to specify that the communication directly between two base stations of different type of wireless system for a handoff, the Dolan reference specifies direct communication between two base stations for a handoff (fig. 7 & supporting description). The Gilhousen reference does not lead a person away from using direct communication between base stations of different types. Hence, the examiner believes that Gihousen and Dolan combined fulfill the argued claim language.

On p. 9, last paragraph to p. 10 para. 2, the applicants argue that Dolan's teaching is inconsistent with that of Gilhousen: "These two protocols have nothing to do with base stations associated with different types of wireless systems that are able to communication with a mobile station." The examiner respectfully disagrees.

The examiner understands that the base stations of Dolan which directly communicate with each other are indeed associated with different types of wireless systems. Dolan para. 7-8 describe the existing problem to solve by his invention: "incompatible with new, more efficient technologies.. Many wireless service providers retain older equipment .. Unfortunately, rapid advances in wireless technology mean that these service providers are often left with obsolete equipment.. Indeed, service

providers cannot create .. a multi-vendor, customized wireless telecommunications network.." Dolan para. 9 describes the motivation/solution of his invention: "Therefore, there is a need in the art for enhancing the compatibility and performance of wireless telecommunication equipment deployed in wireless telecommunication networks." Hence, Dolan indeed provides similar teachings of communication between base stations of different types of wireless stations as in Gilhousen, and therefore is combinable with Dolan to fulfill the claimed limitations as argued.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WARNER WONG whose telephone number is (571) 272-8197. The examiner can normally be reached on 6:30AM - 3:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chi H Pham/
Supervisory Patent Examiner, Art Unit 2416

/W. W./
Examiner, Art Unit 2416